

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-49. (Cancelled).

50. (Currently amended) A system for performing fluid administration on a patient comprising:

- a single liquid pump-(1),
 - a liquid distribution system (2)-connected to said pump (1)-in such a way that liquid can flow from the liquid distribution system (2)-to the pump (1)-via a pump enter line (56)-and vice versa via a pump exit line-(57),
 - liquid supply means (3)-for supplying liquid to a patient (4)-via said liquid distribution system (2)-and said pump-(1),
 - a patient conduit (5)-adapted for connecting said liquid distribution system (2)-to a patient-(4),
 - a drain collector-(6),
- wherein said liquid pump-(1) is unidirectional and said liquid distribution system (2)-comprises switching means ~~such as~~comprising valves designed to alternatively connect the pump enter line (56)-with the supply means (3)-or with the patient conduit-(5), said system further comprising two distinct lines, namely:
- a first line including successively said liquid supply means-(3), said liquid distribution system-(2), said liquid pump-(1), said liquid distribution system-(2) and said patient conduit-(5), and

- a second line including successively said patient conduit-(5), said liquid distribution system-(2), said liquid pump-(1), said liquid distribution system-(2) and said drain collector-(6).

51. (Currently amended) A system according to claim 50 wherein the liquid pump-(1) is a peristaltic pump.

52. (Previously presented) A system according to claim 51 wherein the peristaltic pump is rotatable.

53. (Currently amended) A system according to claim 50 wherein said liquid distribution system-(2) comprises two distinct hub chambers-(7, 8), the first hub chamber-(7) including at least one liquid supply port with dedicated valve means-(9), one patient port with dedicated valve means-(10) and one pump inlet-(26), the second hub chamber-(8) including at least, one patient port (18)-or warmer port (16)-with dedicated valve means and one pump outlet-(27), said system further comprising control means arranged to close said patient port (10)-of the first hub chamber (7)-when said liquid supply port (9)-is open and vice versa.

54. (Currently amended) A system according to claim 53 wherein said second hub chamber (8)-further includes at least one drain port with dedicated valve means-(11), said control means being also arranged to close said patient port (18)-of the second hub chamber (8)-when said drain port (11)-is open and vice versa.

55. (Currently amended) A system according to claim 54 wherein said liquid distribution system ~~(2)~~ only includes two hub chambers ~~(7, 8)~~.

56. (Currently amended) A system according to claim 50 further comprising a warmer system ~~(28)~~, a cavity ~~(17)~~ including a warmer port ~~(19)~~ and a patient port ~~(16)~~, said patient port ~~(18)~~ of the second hub chamber ~~(8)~~ being connected to said warmer port ~~(19)~~ via said warmer system ~~(28)~~.

57. (Currently amended) A system according to claim 53 wherein said first hub chamber ~~(7)~~ includes several liquid supply ports with respective valve means ~~(9)~~.

58. (Currently amended) A system according to claim 57 wherein said liquid supply ports ~~(9)~~ are connected to respective liquid supply means having each a different kind of liquid.

59. (Currently amended) A system according to claim 50 wherein said liquid pump ~~(1)~~ is composed of a tubing and rolling surface on which the tubing is compressed once the cartridge is inserted into a pumping device containing rollers.

60. (Currently amended) A system according to claim 50 wherein said liquid pump ~~(1)~~ and said liquid distribution system ~~(2)~~ are fixed together to form a single cartridge.

61. (Currently amended) A system according to claim 60 wherein said liquid pump ~~(1)~~ is fixed to said liquid distribution system ~~(2)~~ by vibration attenuation means in order to minimize the vibration on the liquid distribution system ~~(2)~~ when the pump is operating.

62. (Previously presented) A system according to claim 50 wherein all hub chambers, including ports, are made within one single part.

63. (Previously presented) A system according to claim 62 wherein said single part is an injected part of plastic material.

64. (Currently amended) A system according to claim 50 wherein each hub chamber ~~(7,~~
~~8)~~ is closed with an upper wall made of a flexible membrane ~~(13)~~, said membrane including valve elements ~~(39)~~ situated above each of said port or port with valve means, said valve elements ~~(39)~~ being designed to close said port or port when the membrane ~~(13)~~ moves downwardly.

65. (Previously presented) A system according to claim 50 wherein said liquid distribution system includes liquid tight joints arranged in such a manner that they allow a liquid tight connection between said liquid distribution system and a membrane situated on it.

66. (Previously presented) A system according to claim 50 wherein said liquid distribution system includes an air sensor situated on the patient conduit side.

67. (Previously presented) A system according to claim 50 comprising a cartridge loading mechanism which allows a tight connection between the membrane and the valves and the liquid distribution system.

68. (Currently amended) A liquid distribution system ~~(2)~~ for a system performing fluid administration on a patient as defined in any one of the previous claims.

69. (Previously presented) A pressure sensor for a system for performing fluid administration on a patient as defined in claim 50.

70. (Currently amended) A system according to claim 50 further comprising a window for detecting correct positioning of a pump flexible ~~the~~ tube.